REMARKS

By this Amendment, Claims 1-6, 12-16 and 18-22 are now pending. Claims 7-9 have been cancelled and Claims 10-22 have been added. Each of the pending claims is believed to define an invention, which is novel and unobvious. Favorable consideration of this case is respectfully requested.

In the Office Action of March 13, 2003, in the parent application, claims 1-6, 12-16, and 18-25 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 4,737,950 to Fechalos in view of U.S. Patent Number 5,809,024 to Ferguson et al. in view of U.S. Patent Number 5,737,333 to Civanlar et al. Claims 1-6, 12-16, and 18-25 in the parent application correspond to the claims currently pending in the present application.

The present invention relates to a telecommunication apparatus for voice telephones installed in a LAN. As recited in independent claim 1, for example, a LAN comprises a LAN switch switching unit for switching and connecting a plurality of interfaces. A plurality of LAN hubs accommodate equipment connected to the LAN switching unit via the interfaces and performing data communication over the LAN. The concentrator comprises a LAN interface connected to the LAN switching unit. At least one set of voice telephone interfaces is connected to at least one voice telephone. Voice data transmitted and received by the at least one set of voice telephone interfaces is converted into MAC frames and the voice data converted into the MAC frames is relayed to the LAN interface.

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It is noted in Section 2, page 2 of the Office Action that Fechalos fails to teach converting digital voice data into MAC frames to be relayed to the LAN interface. Figure 4 of Civanlar et al. is cited as teaching this feature. Figure 4 is described at column 10, lines 18-40 of Civanlar. Figure 4 is an expanded block diagram view of a ROUTEL103. ROUTEL103 includes at least one telephone adapter 163. The telephone adapters 163 maybe one of various types, such as ISDN, BRI, ISDN PRI, and modems for interconnecting ROUTEL103 to telephone network 167. However, no telephone is connected to telephone adapter 163. This is because Civanlar's invention is directed to data communications, not telephone communications, column 1, lines 55-67. There in no conversion of voice data in Civanlar.

In comparison, the present claims are directed to realizing voice communications on LAN or IP-network, which is called voice over IP (VOIP). Therefore, a voice communication is converted into a MAC frame or an IP packet. According to the invention, it is possible to combine a voice system with a data system. This greatly contributes to a reduction in the cost in telecommunications infrastructure. As mentioned above, this feature is neither taught or suggested by Civanlar.

Ferguson et al. does not supplement Fechalos or Civanlar to teach or suggest the above mention feature in the claimed combination. Ferguson et al. teaches a LAN module and an ATM switch. However, there is no mention in Ferguson et al. of voice communications on LAN or IP network. None of the cited references teach or suggest converting a digital voice data into MAC frames to be relayed to a LAN interface. It is

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therefore submitted that the pending claims are neither obvious nor suggested by the cited references.

New claims 12-25 are directed to the third and fourth embodiments of the invention described in the present specification at page 19, line 6 – page 20, line 10 and page 20, line 12 – page 21, line 3, respectively. In particular, reading claim 12 on the embodiment of the invention illustrated in Figure 6, a telecommunication apparatus 30A includes at least one LAN interface 30a, 30b coupled to LAN equipment, a CPU 36, and at least one voice telephone 5, 6. A set of voice telephone interfaces 60 are adapted to receive and transmit digital or analog voice data or call control data between the CPU 36 and the at least one voice telephone 5, 6. The CPU 36 is adapted to convert the digital or analog voice data or call control data into IP packets or MAC frames and to transmit the IP packets or MAC frames to the at least one LAN interface 30a, 30b. Accordingly, independent claim 12 recites that voice data is converted into MAC frames and relayed to a LAN interface. New independent claims 18 and 21 include similar recitations. Accordingly, new claims 12-25 are patentable over the cited references.

Accordingly, early issuance of a Notice of Allowance is respectfully solicited.

In view of the above discussion, it is clear that the cited references do not teach or suggest the claimed invention. Therefore, the withdrawal of the rejections is respectfully requested.

If the Examiner is of the opinion that the prosecution of this application would be advanced by a personal interview, the Examiner is invited to telephone undersigned counsel to arrange for such an interview.

The Commissioner is authorized to charge any fee necessitated by this Amendment to our Deposit Account No. 22-0261.

Respectfully submitted,

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Date

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